## We claim:

1. A compound selected from the group consisting of the formula:

$$R_3 \xrightarrow{R_1} R_1$$

$$O = R_2$$

where R<sub>1</sub> is an aromatic structure, an alicyclic structure, a branched aliphatic

structure or a linear aliphatic group having 5 to 15 carbons; and

R₂ is an aliphatic chain having 10 to 18 carbons;

R<sub>3</sub> is a tertiary amine; and

R<sub>4</sub> is a group that is selectively hydrolyzed in a target cell.

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2. The compound of Claim 1 wherein R<sub>3</sub> is pyrrolidino.

3. The compound of Claim 1 wherein R4 is selected from the group

consisting of an acetyl,  $-CO(CH_2)_nCH_3$  wherein n is at least 1 and wherein  $R_5$  is an alkyl group.

 $-\ddot{c}$  $-\ddot{c}$  $N-R_5$ 

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- 4. The compound of Claim 1 wherein R<sub>1</sub> is 4-hydroxyphenyl.
- 5. The compound of Claim 1 wherein R<sub>1</sub> is 3,4-ethylenedioxy.

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6. A method for inhibiting the growth of cancer cells in a mammal comprising the step of administering to the mammal a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

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- 7. A method for treating a patient having sphingolipidosis by reducing glycosphingolipid synthesis comprising the step of administering to the patient a therapeutically effective amount of a omposition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.
- 8. A method for treating a patient having a microbial or viral infection comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.
- 9. A method for treating a patient having a drug resistant tumor, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.
- 10. A method for reducing tumor angiogenesis in a patient comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.
  - 11. A vaccination method comprising the steps of:
  - a). removing cancer cells sensitive to the compounds below from a patient;
- b). treating the cancer cells in vitro with an effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

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## 12. A compound selected from the group consisting of the formula:

$$R_3 \xrightarrow{R_4} O - R_6$$

$$O = R_2$$

where  $R_1$  is an aromatic structure, an alicyclic structure, a branched aliphatic structure or a linear aliphatic group having 5 to 15 carbons; and

5 R₂ is an aliphatic chain having 10 to 18 carbons;

R<sub>3</sub> is a tertiary amine;

 $R_4$  is a group that is selectively hydrolyzed in a target cell or a hydrogen; and  $R_6$  is a group that is selectively hydrolyzed in a target cell.

10 13. The compound of Claim 12 wherein R<sub>3</sub> is pyrrolidino.

14. The compound of Claim 12 wherein  $R_4$  is selected from the group consisting of an acetyl,  $-CO(CH_2)_nCH_3$  wherein n is at least 1 and wherein  $R_5$  is an alkyl group.

15. The compound of Claim 12 wherein  $R_6$  is selected from the group consisting of an acetyl,  $-CO(CH_2)_nCH_3$  wherein n is at least 1 and wherein  $R_5$  is an alkyl group.

- 20 16. The compound of Claim 12 wherein R<sub>1</sub> is 4-hydroxyphenyl.
  - 17. The compound of Claim 12 wherein R<sub>1</sub> is 3,4-ethylenedioxy.

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18. A method for inhibiting the growth of cancer cells in a mammal comprising the step of administering to the mammal a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

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- 19. A method for treating a patient having sphingolipidosis by reducing glycosphingolipid synthesis complising the step of administering to the patient a therapeutically effective amount of a omposition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.
- 20. A method for treating a patient having a microbial or viral infection comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.
- 21. A method for treating a patient having a drug resistant tumor, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.
- 22. A method for reducing tumor angiogenesis in a patient comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.
  - 23. A vaccination method comprising the steps of:
  - a). removing cancer cells sensitive to the compounds below from a patient;
- b). treating the cancer cells in vitro with an effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

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24. A compound selected from the group consisting of the formulas:

where  $R_2$  is an aliphatic chain having 10 to 18 carbons; and  $R_3$  is a tertiary amine.

25. The compound of Claim 24 wherein R<sub>3</sub> is pyrrolidino.

26. A method for inhibiting the growth of cancer cells in a mammal comprising the step of administering to the mammal a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.

- 27. A method for treating a patient having sphingolipidosis by reducing glycosphingolipid synthesis comprising the step of administering to the patient a therapeutically effective amount of a omposition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.
- 28. A method for treating a patient having a microbial or viral infection comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.
- 29. A method for treating a patient having a drug resistant tumor, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.
- 30. A method for reducing tumor angiogenesis in a patient comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.

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- 31. A vaccination method comprising the steps of:
- a). removing cancer cells sensitive to the compounds below from a patient;
- b). treating the cancer cells in vitro with an effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.